

Incidence and Mortality Rate Trends

Lymphoma, including Hodgkin lymphoma and non-Hodgkin lymphoma (NHL), represents approximately 5 percent of all cancers in the United States. Although Hodgkin lymphoma is the better known form, the incidence of Hodgkin lymphoma is much lower than that of NHL.

Due to improvements in the treatment of Hodgkin lymphoma, the mortality rate has decreased significantly over the past 25 years. Although the incidence rate for whites has remained relatively steady during this period, rates for African Americans have increased.

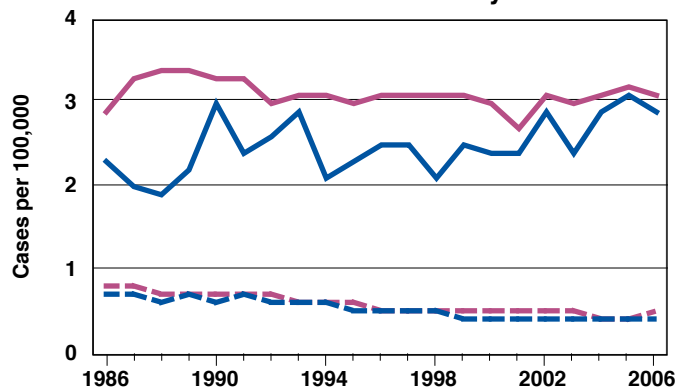
The NHL incidence rate has increased significantly in the past two decades. Incidence and mortality rates for NHL are higher for whites than African Americans and other ethnic groups.

It is estimated that approximately \$4.6 billion¹ is spent in the United States each year on treatment for lymphoma.

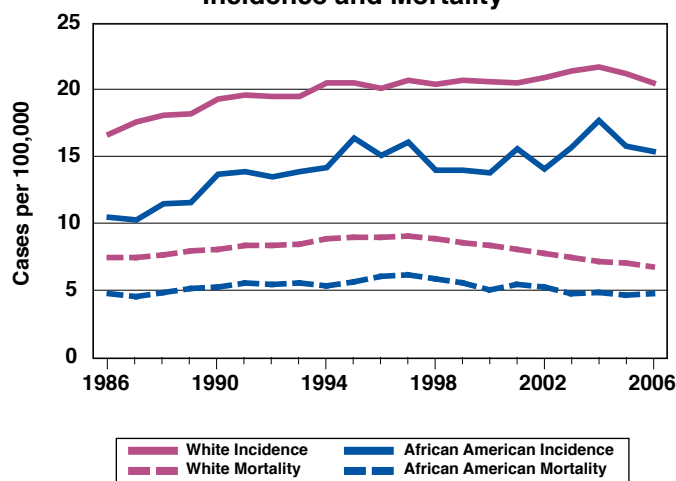
Source for incidence data: Surveillance, Epidemiology, and End Results (SEER) Program and the National Center for Health Statistics. Additional statistics and charts are available at <http://seer.cancer.gov/>.

¹Cancer Trends Progress Report (<http://progressreport.cancer.gov/>), in 2004 dollars, based on methods described in *Medical Care* 2002 Aug;40(8 Suppl):IV-104-17.

U.S. Hodgkin Lymphoma Incidence and Mortality



U.S. Non-Hodgkin Lymphoma Incidence and Mortality



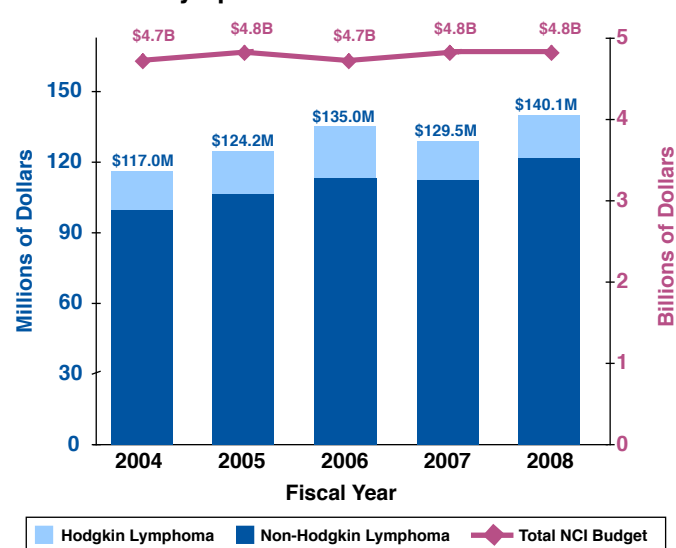
Trends in NCI Funding for Lymphoma Research

The National Cancer Institute's (NCI) investment² in lymphoma research increased from \$117.0 million in fiscal year 2004 to \$140.1 million in fiscal year 2008.

Source: NCI Office of Budget and Finance (<http://obf.cancer.gov/>).

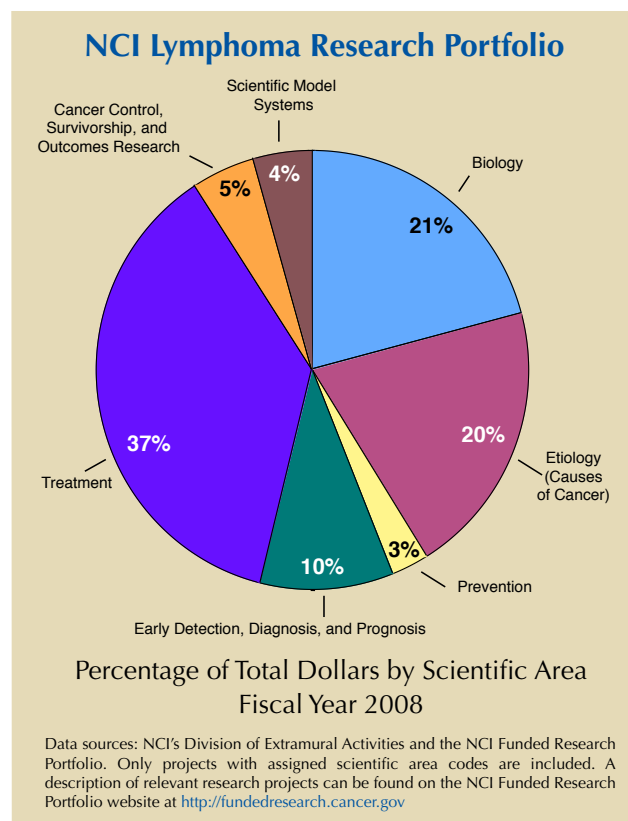
²The estimated NCI investment is based on funding associated with a broad range of peer-reviewed scientific activities. For additional information on research planning and budgeting at the National Institutes of Health (NIH), see <http://www.nih.gov/about/>.

NCI Lymphoma Research Investment



Examples of NCI Activities Relevant to Lymphoma

- Five lymphoma-specific **Specialized Programs of Research Excellence (SPORES)** are moving results from the laboratory to the clinical setting. SPORE researchers are evaluating novel lymphoma therapies (including immunotherapies), studying leukemia biology and epidemiology, and identifying lymphoma biomarkers. <http://spores.nci.nih.gov/current/lymphoma/index.htm>
- Members of the **International Lymphoma Epidemiology (InterLymph) Consortium**, an international group of epidemiologists researching the cause of NHL, share data and biological samples for the analysis of gene-environment interactions. <http://interlymph2009.ubconferences.com/>
- The U.S. Food and Drug Administration (FDA), NCI, and the Centers for Medicare and Medicaid Services (CMS) jointly support the **Oncology Biomarker Qualification Initiative (OBQI)** to improve cancer therapy development and cancer outcomes through biomarker development and evaluation. The first OBQI project will assess whether fluorodeoxyglucose-positron emission tomography (FDG-PET) scanning predicts tumor response in patients with NHL. This trial is active and currently recruiting participants. <http://www.cancer.gov/newscenter/pressreleases/OBQI>
- NCI's **Cutaneous T Cell Lymphoma (CTCL) Working Group** promotes the dissemination of new CTCL research and provides advice on the treatment of patients referred to NCI with complex or advanced CTCL. <http://ccr.cancer.gov/faculties/faculty.asp?facid=456>
- The **What You Need to Know About™ Hodgkin Lymphoma** and **What You Need to Know About™ Non-Hodgkin Lymphoma** booklets contain information



about lymphoma diagnosis, staging, treatment, and follow-up care. Information specialists can also answer questions about cancer at 1-800-4-CANCER. <http://www.cancer.gov/cancertopics/wyntk/hodgkin> and <http://www.cancer.gov/cancertopics/wyntk/non-hodgkin-lymphoma>

- The **Lymphoma and Hodgkin Disease Home Pages** direct visitors to up-to-date information on lymphoma treatment, prevention, genetics, causes, screening, testing, and other topics. <http://cancer.gov/cancerinfo/types/non-hodgkins-lymphoma> and <http://cancer.gov/cancerinfo/types/hodgkinslymphoma>

Selected Advances in Lymphoma Cancer Research

- Researchers characterized **proteins in the tissue surrounding follicular lymphoma (FL) tumors** to gain a better understanding of FL biology. http://home.ccr.cancer.gov/inthejournals/Jaffe_02_10-22-08-508-Compliant-v2.asp
- Measuring **gene activity signatures in tumor biopsies could be used to predict survival** among patients with large B-cell lymphoma. <http://www.ncbi.nlm.nih.gov/pubmed/19038878>
- Researchers **identified risk factors (e.g., meat consumption, body mass index, immune system dysfunction)** for developing various non-Hodgkin lymphoma subtypes. <http://www.ncbi.nlm.nih.gov/pubmed/18796628>
- First-degree **relatives of lymphoplasmacytic lymphoma/Waldenstrom macroglobulinemia patients** have a 3- to 20-fold increased risk of developing certain subtypes of lymphoma. <http://www.ncbi.nlm.nih.gov/pubmed/18703425>